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10/520,921	01/12/2005	Seiichi Nishikawa	DAIN:796	4916

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OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER	
KELLY, RAFFERTY D	

ART UNIT	PAPER NUMBER
2876	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,921	NISHIKAWA, SEIICHI	
	Examiner	Art Unit	
	RAFFERTY KELLY	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *11 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-34 and 68-90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *18-34 and 68-90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Amendment filed on 5/11/09 has been acknowledged and entered.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on 5 different foreign applications. It is noted, however, that applicant has not filed a certified copy of any of the applications as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 68-75, 79, 80, 81, 84-88, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpier et al. (US 6568600 B1) in view of Gray (US 6634565).

Regarding claims 68 and 69, Carpier teaches an IC module, comprising: an antenna coil (66 and 67) having antenna terminals (660, 661, 670, and 671); a substrate (50c); an IC chip (3) mounted on the substrate (Fig. 5A) and having antenna terminals (Fig. 5A); and a contact terminal plate (1C) mounted on the substrate and having a plurality of contact terminals (Fig. 5C); and said IC module includes a contact terminal CE1 (22) and a contact terminal CE2 (23) connected to the antenna terminals of the IC chip, wherein said terminals CE1 and CE2 of the contact terminal plate are adapted to be connected to the antenna terminals of the antenna coil (Fig. 5A, 5C); and a pair of U-shaped circuits (antennas 66 and 67 are U-shaped circuits) are formed so as to

surround the IC chip on a surface of the substrate opposite a surface of the substrate on which the contact terminal plate is mounted (Fig. 5A), the contact terminals CE1 and CE2 being connected to the U-shaped circuits, respectively, and the U-shaped circuits being connected to the antenna terminals of the IC chip, respectively (Fig. 5C).

Carpier lacks that the plurality of contact terminals conform to the ISO 7816 standard.

Gray teaches an IC module with a plurality of contact terminals, including extra contact terminals wherein the plurality of contact terminals includes terminals C1-C8 conforming to ISO 7816 standard (Fig. 5), wherein said contact terminal CE1 (C9) is disposed between said terminal C1 and said terminal C5 among said eight contact terminals C1-C8, and said contact terminal CE2 (C13) is disposed between said terminals C4 and C8 among eight contact terminals C1-C8.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the contact pad set up as taught by Gray because it allows for a wider range of functions to be incorporated into the IC card (Col. 2 Lines 3-8).

Regarding claim 70, Carpier in view of Gray teaches the IC module according to claim 68, as shown above. Carpier further teaches wherein the contact terminals CE1 and CE2 are those to be connected to an antenna coil formed in a SIM holder in an IC card holder (Abstract, Fig. 5A).

Regarding claims 71, 72, and 79, Carpier in view of Gray teaches the IC module according to claim 68, as shown above. Carpier further teaches wherein the antenna terminals of the IC chip are connected to the contact terminals CE1 and CE2 by wire

bonding (Col. 1 Lines 25-34) via through holes (220, 230), and the terminals of the IC chip other than the antenna terminals which are connected to the U-shaped circuits are connected to the connecting pads placed on the surface of the substrate on which the U-shaped circuits are formed (Fig. 5C).

Regarding claim 73, Carpier in view of Gray teaches the IC module according to claim 68, as shown above.

Carpier does not teach using the ISO 7816, ISO 14443, and USB standards.

Carpier teaches, in another embodiment, using the ISO 7816 standard and ISO 14443 standard in a communication card (Col. 2 Lines 1-8)

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the ISO 7816 and ISO 14443 standards because it means the card will be able to be used with a very wide range of standard card readers.

Gray teaches a card with a USB contact interface (Fig. 7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the card because it allows for a much more versatile and useful card (Col. 2 Lines 3-8).

Regarding claim 74, Carpier in view of Gray teaches the IC module according to claim 68, as shown above. Carpier further teaches wherein antenna-terminal plates are connected to said antenna-terminal plates of the IC chip, and said antenna-terminal plates are adapted to be connected to antenna-terminals of the antenna coil (Fig. 5A).

Regarding claim 75, Carpier in view of Gray teaches an IC card comprising an IC module according to claim 68, and a card holding the IC module (Abstract).

Regarding claim 80, Carpier in view of Gray teaches the IC module according to claim 79, as shown above. Carpier further teaches wherein the U-shaped circuits are connected to an antenna coil formed in a card (U-shaped circuits are used as antenna coil and therefore are connected to an antenna coil - Fig. 5A).

Regarding claim 81, Carpier in view of Gray teaches the IC module according to claim 79 as shown above. Carpier further teaches wherein the U-shaped circuits are connected to the contact terminals not used for contact communication among the plurality of contact terminals (terminals 22 and 23 are used for contactless communication).

Regarding claim 84, Carpier in view of Gray teaches the IC module according to claim 79, as shown above. Carpier further teaches wherein the U-shaped circuits are connected to antenna terminals of the IC chip by wire bonding (Col. 1 Lines 25-34) (Fig. 1).

Regarding claim 85, Carpier in view of Gray teaches the IC module according to claim 79, as shown above. Carpier further teaches wherein the U-shaped circuits are connected to contact terminals CE1 (23) and CE2 (22), the contact terminals being connected to antenna terminals of the IC chip (Fig. 5A, 5C).

Regarding claims 86 and 87, Carpier in view of Gray teaches the IC module according to claim 85, as shown above. Carpier further teaches wherein the U-shaped circuits are connected to the contact terminals CE1 and CE2 via through holes, respectively (230 and 220) and by wire bonding (Col. 1 Lines 25-34).

Regarding claim 88, Carpier in view of Gray teaches the IC module according to claim 85, as shown above. Carpier further teaches wherein the contact terminals CE1 and CE2 are those to be connected to an antenna coil formed in a SIM holder or an IC card holder (Abstract, Fig. 5A).

Regarding claim 90, Carpier in view of Gray teaches an IC card comprising an IC card module according to claim 79 (abstract of Carpier).

2. Claims 76-78 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpier as modified by Gray and in further view of Jigour et al. (US 5815426). The teachings of Carpier as modified by Gray have been discussed above.

Regarding claims 76-78 and 89, Carpier as modified by Gray teaches the IC module according to the claims above. Carpier further teaches wherein the contact terminals CE1 and CE2 are those to be connected to an antenna coil formed in a module holder (Fig. 5A)

Carpier lacks the IC module being part of a SIM card/holder.

Jigour teaches an IC module as part of a SIM card (Fig. 4), and wherein one or some of a half-length photograph, a name and a number are printed on a surface of the SIM base opposite a surface of the SIM base on which the contact terminal plate is mounted (Col. 7 Lines 22-29).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the IC module described by Carpier as modified by Gray with the SIM card set up of Jigour because it would allow the IC module to be used in a wider range of applications. For example, the card could be used in a mobile phone if it were

a SIM card. Further, placing graphics on the card would allow for more customization or for advertising by the card supplier.

3. Claims 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpier as modified by Gray and in further view of Fidalgo (US 5598032). The teachings of Carpier as modified by Gray have been discussed above.

Regarding claims 82 and 83, Carpier in view of Gray teaches the IC module according to claim 81, as shown above.

Carpier lacks connecting the U-shaped circuits to terminals C4 and C8.

Fidalgo teaches wherein the U-shaped circuits (antennas 5 are U-shaped – Fig. 2) are connected to terminals C4 and C8 (Fig. 8), and wherein the U-shaped circuits are connected to the terminals C4 and C8 via through holes (Col. 3 Lines 40-53).

Therefore it would have been obvious to one of ordinary skill in the art to connect the U-shaped antennas to terminals C4 and C8 because it allows the card to be used in a contactless mode while using ISO standard 7816, thus making the card more versatile.

4. Claims 18-20, 22-26, 28-32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo in view of Jigour and in further view of Leydier et al. (US 6694399 B1)

Regarding claim 18, Fidalgo teaches a holder for holding an IC device (Fig. 1), said holder comprising: a case (Fig. 1); a terminal plate (3) contained in the case and capable of being electrically connected to a contact-terminal plate (10 and 11) included in the device (Fig. 1); and an antenna coil (5) formed in the case (Fig. 2); wherein

terminals (15) to be connected to the antenna coil among those formed on the terminal plate are those to be connected to contact terminals (11), not used for contact communication, of the device (Fig. 2 and Fig. 8).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Fidalgo also lacks the holder detachably holding the card.

Leydier teaches a SIM holder for detachable holding a card (Fig. 4).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a holder that is detachable from the card because then the card can be used individually when the features of the holder are not required. For example, as shown in Leydier, if a USB connection to the card is not required, then the bulky holder does not need to be attached to the card.

Regarding claim 19, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 18, as shown above. Fidalgo further teaches wherein the antenna coil is formed on an inner surface (Fig. 1) of the case along the peripheral edges (Fig. 2) of the card held in the case (Fig. 1).

Regarding claim 20, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 19, as shown above. Fidalgo further teaches wherein the antenna coil is formed in the case around the terminal plate (Fig. 2) along the peripheral edges fo the SIM held in the case (Fig. 1).

Regarding claim 22, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 18, as shown above.

Fidalgo lacks explicitly teaching the size of the device.

Jigour teaches wherein the SIM has the shape of a thin plate having a thickness of 1.0 mm or below and a substantially rectangular shape not greater than 24 mm x 15 mm in a projection on a horizontal plane (Col. 7 Line 66 – Col. 8 Line 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use these dimensions because they are a standard SIM size and it would allow the SIM to be used in most devices.

Regarding claim 23, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 18, as shown above. Fidalgo further teaches wherein the SIM held in the case is connected to the antenna coil (5) for noncontact communication with an external device (abstract).

Fidalgo lacks the USB features.

Leydier et al. teaches a converter placed in the case and capable of converting an ISO 7816 interface (Fig. 1) into a USB interface (Fig. 4); and a USB connector placed on the case (41 and 42) (Col. 7 Line 64 to Col. 8 Line 45).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Regarding claim 24, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 23, as shown above. Fidalgo further teaches wherein the SIM held in the case includes an IC chip provided with a dual interface for contact and noncontact communication (Col. 3 Lines 14-16), and a SIM antenna coil (5) connected to the IC chip (Fig. 1).

Regarding claim 25, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 23, as shown above. Fidalgo further teaches wherein the antenna coil is formed on an inner surface of the case (Fig. 1) so as to extend along the peripheral edges of the SIM held in the case (Fig. 2).

Regarding claim 26, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 26, as shown above. Fidalgo further teaches wherein the antenna coil is formed in the case around the terminal plate along the peripheral edges of the SIM held in the case (Fig. 1 and Fig. 2).

Regarding claim 28, Fidalgo teaches a card holder for holding a card, said card holder comprising: a case (Fig. 1); a terminal plate contained in the case and capable of being electrically connected to a contact-terminal plate included in the card (Fig. 2); and an antenna coil formed in the case (5); wherein terminals of the terminal plate (15) connected to the antenna coil, are connected to extra contact terminals on the card (Fig. 8).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Fidalgo also lacks the holder detachably holding the card.

Leydier teaches a SIM holder for detachable holding a card (Fig. 4).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a holder that is detachable from the card because then the card can be used individually when the features of the holder are not required. For example, as shown in Leydier, if a USB connection to the card is not required, then the bulky holder does not need to be attached to the card.

Regarding claim 29, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches terminals CEH1, CEH2 (15) of the terminal plate corresponding to terminals CE1 and CE2 of the SIM are connected to the antenna coil (5) (Fig. 2).

Fidalgo lacks the USB connector placed on the case.

Leydier teaches a USB connector placed on the case (Fig. 4).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Regarding claim 30, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 29, as shown above. Fidalgo further teaches wherein the SIM held in the case is provided with contact, noncontact and USB contact interfaces, and an antenna coil (5) connected to the IC chip.

Fidalgo does not explicitly teach the USB contact interface, however, the contact interface of Fidalgo could be used as a USB contact interface.

Leydier teaches a USB connector placed on an IC card holder (Fig. 4), and shows that a standard smart card contact interface (on card 200) can be used as a USB contact interface.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Regarding claim 31, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches wherein the antenna coil (5) is formed on an inner surface of the case along the peripheral edges of the SIM held in the case (Fig. 1 and Fig. 2).

Regarding claim 32, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches wherein the antenna

coil is formed in the case around the terminal plate (Fig. 2) substantially along the perpherial edges of the SIM held in the case (Fig. 1).

Regarding claim 34, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches wherein terminals CEH1 and CEH2 (15) on the terminal plate corresponding to terminals CE1 and CE2 of the SIM are connected to the antenna coils (Fig. 2).

5. Claims 21, 27, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo as modified by Jigour and Leydier, and in further view of Brewer et al. (US 654154 B1). The teachings of Fidalgo as modified by Jigour and Leydier have been discussed above.

Regarding claims 21, 27, and 33, Fidalgo as modified by Jigour and Leydier teach the devices of claims 18, 23, and 28, as shown above.

Jigour further lacks the case being transparent.

Brewer teaches wherein at least a part of the case is formed of a transparent resin, through which one or some of a half-length photograph, a name and a number printed on a surface of the SIM held in the case can be viewed (Claim 2 of Brewer).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a transparent holder because it allows a user to see the printing on the SIM card even when it is in the holder. This allows the card to be identifiable without needing to be removed from the holder.

Response to Arguments

Applicant's arguments filed 5/11/09 have been fully considered but they are not persuasive.

Applicant argues that Fidalgo does not teach the terminal plate being connected to the contact-terminal plate, however this argument is not found to be persuasive. Antenna 5 and contacts 15 could reasonably be considered to be part of the "terminal plate" (See figure 2 of Fidalgo). Using this interpretation, the "terminal plate" is electrically connected to the "contact-terminal plate" via antenna 5 and contacts 15.

Regarding new claims 68-90, new grounds of rejection are presented. These new grounds of rejection are required because these claims contain new features not previously considered and are in view of Carpier and Gray.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAFFERTY KELLY whose telephone number is (571)270-5031. The examiner can normally be reached on Mon. - Fri. 800-1730 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rafferty Kelly/
Examiner, Art Unit 2876
8-7-09

/Michael G Lee/
Supervisory Patent Examiner, Art Unit 2876